

CLAIMS

1. An exhaust gas control apparatus including a particulate filter (3) provided in an exhaust passage (120), which captures particulate matter in present in exhaust gas; and
5 pressure difference detection means (10) for detecting a difference in pressure on an upstream side (3a) and on a downstream side (3b) of the particulate filter (3) characterized in that

pipes that introduce the pressures to the pressure difference detection means (10) are provided; the pipes include an upstream pipe that introduces the pressure on the
10 upstream side (3a) of the particulate filter (3) to the pressure difference detection means (10); and the upstream pipe (5) includes an expanded pipe portion (50) near the particulate filter (3), wherein the expanded pipe portion (50) has an inner diameter greater than that of a portion of the upstream pipe (5) near the pressure difference detection means (10).

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2. The exhaust gas control apparatus according to claim 1, characterized in that the expanded pipe portion (50) of the upstream pipe (5) includes a bent portion (51c).

3. The exhaust gas control apparatus according to claim 1, characterized in the
20 expanded pipe portion (50) of the upstream pipe (5) includes a bent portion (51c) that is located in a first position where the upstream pipe (5) is bent in a direction from a pressure inlet port (5a) on a side of the particulate filter (3) toward the pressure difference detection means (10).

25 4. The exhaust gas control apparatus according to claim 2 or 3, characterized in that the bent portion (51c) of the upstream pipe (5) is bent at an angle of 90 degrees or greater.

5. The exhaust gas control apparatus according to any one of claims 1 through 4,

characterized in that the upstream pipe (150) further includes a short pipe (153) positioned on an upstream side of the expanded pipe portion (151), which has an inner diameter and an outer diameter equal to those of a downstream pipe (6) that introduces the pressure on the downstream side (3b) of the particulate filter (3) to the pressure difference detection means (10).

6. The exhaust gas control apparatus according to any one of claims 1 through 5, characterized in that a connection portion (R) between the expanded pipe portion (251) and the portion (252) of the upstream pipe near the pressure difference detection means (10) has a conical shape so that the inner diameter of the upstream pipe (250) gradually changes.

7. An exhaust gas control apparatus comprising:

a particulate filter (3) provided in an exhaust passage (120), which captures particulate matter in exhaust gas;

a pressure difference sensor (10) that detects a difference in pressure between on an upstream side (3a) and on a downstream side (3b) of the particulate filter (3);

an upstream pipe (5) that introduces the pressure on the upstream side (3a) of the particulate filter (3) to the pressure difference detection sensor; and

a downstream pipe (6) that introduces the pressure on the downstream side (3b) of the particulate filter (3) to the pressure difference sensor (10), wherein

the upstream pipe (5) includes an expanded pipe portion (50) near the particulate filter (3), wherein the expanded pipe portion (50) has an inner diameter greater than that of a portion of the upstream pipe (5) near the pressure difference sensor (10).

8. The exhaust gas control apparatus according to claim 7, wherein the expanded pipe portion (50) of the upstream pipe includes a bent portion (51c).

9. The exhaust gas control apparatus according to claim 7, wherein the expanded

pipe portion (50) of the upstream pipe (5) includes a bent portion (51c) that is located in the first position where the upstream pipe (5) is bent in a direction from a pressure inlet port (5a) on a side of the particulate filter (3) toward the pressure difference detection means (10).

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10. The exhaust gas control apparatus according to claim 8 or 9, wherein the bent portion (51c) of the upstream pipe (5) is bent at an angle of 90 degrees or greater.

10 11. The exhaust gas control apparatus according to any one of claims 7 through 10, wherein the upstream pipe (150) further includes a short pipe (153) positioned on an upstream side of the expanded pipe portion (151), which has an inner diameter and an outer diameter equal to those of the downstream pipe (6).

15 12. The exhaust gas control apparatus according to any one of claims 7 through 11, wherein a connection portion (R) between the expanded pipe portion (251) and the portion (252) of the upstream pipe near the pressure difference sensor (10) has a conical shape so that the inner diameter of the upstream pipe (250) gradually changes.